

IN THE CLAIMS

1. (currently amended) A method of screening for candidate therapeutic agents, comprising steps of:

- i) contacting a test compound with a PDE11A polypeptide,
- ii) detecting binding of said test compound to said PDE11A polypeptide, ~~and~~
- iii) identifying the test compound as a candidate therapeutic agent useful in

the treatment of a cardiovascular disease ~~selected from the group consisting of disorders of the peripheral and central nervous system, cardiovascular diseases, cancer, liver disease, and genitourinary disease~~ if the test compound binds to said PDE11A polypeptide; and

iv) determining whether the test compound has an effect on a symptom of the disease in an *in vivo* assay.

2-3. (canceled)

4. (previously presented) The method of claim 1, wherein the step of contacting is in or at the surface of a cell.

5. (previously presented) The method of claim 4, wherein the cell is *in vitro*.

6. (previously presented) The method of claim 1, wherein the step of contacting is in a cell-free system.

7. (previously presented) The method of claim 1, wherein the polypeptide is coupled to a detectable label.

8. (previously presented) The method of claim 1, wherein the compound is coupled to a detectable label.

9. (previously presented) The method of claim 1, wherein the test compound displaces a ligand which is first bound to the polypeptide.

10. (previously presented) The method of claim 1, wherein the polypeptide is attached to a solid support.

11. (previously presented) The method of claim 1, wherein the compound is attached to a solid support.

12-26. (canceled)

27. (new) A method of screening for candidate therapeutic agents, comprising steps of:

- i) contacting a test compound with a PDE11A polypeptide,
- ii) detecting binding of said test compound to said PDE11A polypeptide,
- iii) identifying the test compound as a candidate therapeutic agent useful in

the treatment of a disease selected from the group consisting of disorders of the peripheral and central nervous system, cancer, liver disease, and genitourinary disease if the test compound binds to said PDE11A polypeptide; and

iv) determining whether the test compound has an effect on a symptom of the disease in an *in vivo* assay.

28. (new) The method of claim 1, wherein the step of contacting is in or at the surface of a cell.

29. (new) The method of claim 4, wherein the cell is *in vitro*.

30. (new) The method of claim 1, wherein the step of contacting is in a cell-free system.

31. (new) The method of claim 1, wherein the polypeptide is coupled to a detectable label.

32. (new) The method of claim 1, wherein the compound is coupled to a detectable label.

33. (new) The method of claim 1, wherein the test compound displaces a ligand which is first bound to the polypeptide.